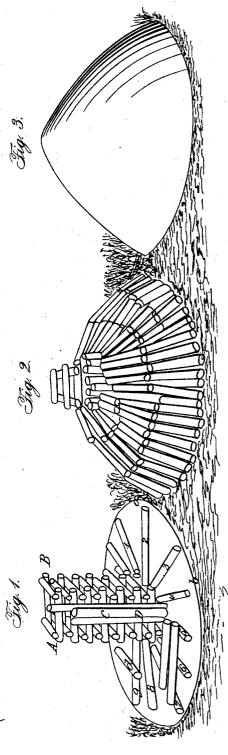
## M. CARROLL. Making Charcoal.

No. 720.

Patented Apr. 28, 1838.



Joseph Jackson HS arnagin

Inventor. Michael Carroll

## United States Patent Office.

MICHAEL CARROLL, OF MONROE COUNTY, TENNESSEE.

IMPROVED MODE OF FORMING A KILN FOR MAKING CHARCOAL.

Specification forming part of Letters Patent No. 720, dated April 28, 1838.

To all whom it may concern:

Be it known that I, MICHAEL CARROLL, of the county of Monroe and State of Tennessee, have invented an improvement in the manner of forming the kiln or pile of wood for the purpose of manufacturing or burning the same into charcoal, by means of which improvement I am enabled advantageously to use timber of larger size for that purpose than it has been heretofore found convenient to employ, excepting in kilns built of brick or stone; and I do hereby declare that the following is a full

and exact description thereof.

I form the chimney A.B, Figure 1, of the kiln by the crossing of short timbers in the ordinary way. Around this chimney I then pile logs CD, of six or eight inches in diameter (more or less) and eight or ten feet in length, in a direction nearly perpendicular, the first row resting against the upper part of the chimney, and the piling being continued in this way until a circle of eight or nine feet in diameter (more or less) is formed. I then place upon the ground, all around the pile so formed, what may be denominated "sill-logs," number of the pile so formed, bers 1 to 9, of about four feet in length and eight or nine inches in diameter, pointing from the circumference toward the center of the kiln. They should be about three feet apart at their outer ends. These serve as a foundation

upon which to place other logs, d e f, of any size, but cut into lengths of eight or ten feet, which are piled upon them crosswise and horizontally until they rise toward the chimney to the height of eight or ten feet, gradually decreasing to the height of about four feet at the circumference a b c of the kiln. To complete the circle, I take shorter wood—say of three or four feet in length—which I pile around in a suitable manner. The pit or kiln is then ready to be covered up, fired, and otherwise managed in the usual manner.

Fig. 2 is the pile ready for covering, and Fig. 3 the pile ready to fire.

I do not intend by anything contained in the foregoing description to limit myself as to the size of the pit, pile, or kiln which I form, as the same principle will apply whether twenty-five or a hundred cords of wood are to be charred, my claim to invention consisting in the particular manner of forming the pile, as herein fully set forth, so as to enable me to use logs of a very large size, and to convert the same into charcoal without any difficulty.

For a further illustration of my plan, I refer to a drawing thereof hereunto annexed. MICHAEL CARROLL.

THOS. I. CALDWELL, MICHAEL GIRDNER.